MATERIAL SAFETY DATA SHEET

MSDS

DATE 12/14/99

MSDS # 512220

NEW [X] REVISED []

PURSELL INDUSTRIES INC

EMERGENCY PHONE NUMBERS

Syladauga AL 35150

PURSELL 1-800-874-8892

CHEMIREC 1-800-424-9300

SECTION - I - PRODUCT INFORMATION

PRODUCT NAME Bandum Bone Meal 5-15-0

PRODUCT NUMBER 512220

CHEMICAL NAME Bone Meal

CHEMICAL CLASS Fertilizer Compound

NFPA RATING Health - 1 Flammability - 0 Reactivity - 0 Special - None

NFPA CODES 0=Least 1=Slight 2=Moderate 3=High 4=Extreme

SECTION - II - INCREDIENT INFORMATION

PEL

INGREDIENT

CAS NUMBER

TLV

% BY WEIGHT

inert components

Mixture

NA

NA

100.00

SECTION - UI - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point NA

Bulk Density 66-68 lb/ft

Vapor Pressure (mmHg) NA

Melting Point NA

Vapor Density (Air =1) NA

Evaporation Rate(Butyl Acetate=1) NA

Solubility in Water Fertilizer chemicals are water soluble

Appearance and Odor Brown to tan fertilizer granules. Slight earthy odor

SECTION - IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point NA

Flammable Limits LEL NA UEL NA Extinguishing Media. Water spray, dry chemical, CO2, sand, or fine earth. Material is essentially non-flammable

Special Fire Fighting Procedures. Wear full protective clothing and self-contained breathing apparatus. Short term exposure to smoke, fumes, and gases can lead to irreversible lung injury without early signs and symptoms. Use extinuusling media suitable for the surrounding fire. Evacuate downwind if large quantities are involved in fire

Unusual Fire and Explosion Hazards: Thermal decomposition may produce irritating or poisonous gases. Run-off from fire control area or dilution water may cause pollution. If surface water is contaminated, contact local authorities

SECTION - V - REACTIVITY DATA

Stability Stable

incompatibility (Materials to avoid). Store separately from acids and bases

Hazardous Decomposition or Byproducts. Thermal degradation may produce. Carbon monoxide and entrogen oxides

Hazardous Polymerization Will not occur

SECTION - VI - HEALTH HAZARD DATA

ACUTE AND CHRONIC HEALTH HAZARDS / EMERGENCY AND FIRST AID PROCEDURES

Route(s) of entry Inhalation, Ingestion

Eyes Dusts may cause moderate intuation. If eye contact occurs, flush eyes with running water for 15 minutes

Skin Dusts may cause moderate irritation. Wash with soap and water if irritation occurs

Inhalation. Dusts may cause moderate irritation to the nose, throat, and lungs. If prolonged inhalation of dust occurs, remove

Ingestion, Immediately seek medical assistance, Call a physician. The phone number to the National Poison Control Center is (202) 625-3333 May cause headache nausea, and vomiting

Signs and Symptoms of Exposure Irritation to eyes, skin, or respiratory or gastrointestinal tract. No chronic health effects data have been established

Other Health Warnings Notes to physician Treat symptomatically

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SECTION - VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Storage Store in original container in a cool dry area. Keep out of reach of children and domestic animals. Store separately from teed food, pesticides, seeds and other fertilizers so that cross contamination does not occur

Procedures in case of spill or release. If material is uncontaminated, collect and reuse as recommended for product. Avoid dusts, or use NIOSH/MSHA dust/mist approved respirator

Waste Disposal Method. Apply as terulizer if uncomminated. If contaminated, dispose of in accordance with all Federal, State, and Local laws

Other Precautions Do not use directly on water. Do not contaminate water supplies

SECTION - VIII - CONTROL MEASURES Ventilation Requirements None required with normal use of this product

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection None required with normal use of this product

Protective Clothing. None normally required. Those with unusually sensitive skin should wear long sleeved shirt, long pants, shoes and socks, and impervious gloves

Eye Protection Use of safety glasses with side shields is recommended

SECTION - IX - ADDITIONAL INFORMATION

This product is a plant food. However, large spills could possibly kill vegetation or cause illness in ammals. Contamination of waterways may cause fish kill Keep animals away from large spills

SECTION - X- SARA TITLE III REQUIREMENTS

Section 302 Extremely Hazardous Substances No SARA Hazard Category None

Section 311/312 Hazardous Substances No. Carcinogenic Compound(s) (IARC/NTP/OSHA/ACGIH) None Section 313 Toxic Chemicals No

OTHER PRECAUTIONS AND COMMENTS

The information in this Material Safety Data Sheet is believed to accurately reflect the scientific evidence used in making the hazard determination. It is considered only as a goode, and not a warranty or representation for which we assume legal responsibility Independent decisions must be made on the suitability and use of this product dependent on variable storage conditions or locally applicable laws or government regulations. The buyer and user assumes all risk and liability of storage, handling, and use of this product not in accordance with the terms of the product label

NA = NOT APPLICABLE

NI - NOT INDICATED

PURSELL INDUSTRIES, INC. Contact Customer Service Telephone 1-800-874-8892 (256) 245-5282